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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/889,666 | 09/25/2001 | Rudolf Kodes | 1454.1079 | 6964 |

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| EXAMINER |
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THANGAVELU, KANDASAMY

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| ART UNIT | PAPER NUMBER |
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2123

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/889,666 | KODES, RUDOLF | |
| | Examiner | Art Unit | |
| | Kandasamy Thangavelu | 2123 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 September 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-20 of the application have been examined.

Foreign Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on application 19901878.2 filed on January 19, 1999 in Germany and PCT application PCT/DE00/00075 filed on January 11, 2000. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

3. An information disclosure statement was filed on September 25, 2001, but it did not have a list of patents and papers. The applicant is directed to send the information disclosure statement with a list of patents and papers and copies of the non-patent literature.

Drawings

4. The drawings submitted on September 25, 2001 are accepted with the following exception:

Figure 1 does not show a portion of a complex process model for a technical system, as claimed. There are no technical system, no components of the technical system and no process model in the figure. What it shows are a lot of lines, a few arrows, one block with words and some additional words. One of ordinary skill in the art will not recognize it as part of the process model of a technical system.

Specification

5. The disclosure is objected to because of the following informalities:

Page 4, Para 0030 states, "Fig. 1 shows a portion of a complex process model for a technical system. ... An arrow at the end of a line signifies an orientation of the same". The Examiner takes the position that Fig. 1 does not show a portion of a complex process model for a technical system. There are no technical system, no components of the technical system and no process model in the figure. It is not clear as to what the applicant by the orientation of the same. Does it mean angular deviation between two elements of the system? How is the orientation measured and specified, in degrees of angle?

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. §112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

7.1 Claim 1 states in part, “connecting a first unit to a set of second units in a predefined fashion; and determining at least one third unit from the set of second units which has a predefined relationship with the first unit”. The specification does not describe anywhere what is meant by “predefined fashion” and “predefined relationship”. The specification does not describe what is a first unit, what is a second unit and what is a third unit and what are the criteria to classify the units as the first, second and the third units.

7.2 Claim 4 states in part, “the at least one third element fulfils a predefined connection criterion to the first unit”. The specification does not describe anywhere what is the predefined connection criterion and how it is selected or specified.

7.3 Claim 6 states in part, “the first unit is used to represent *only the at least one third unit* which is a predecessor of the first unit”. The specification does not describe why the first unit is

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used to represent only the at least one third unit and how it represents only the at least one third unit.

7.4 Claim 7 states in part, “the first unit is used to represent *only the at least one third unit* which is a successor of the first unit”. The specification does not describe why the first unit is used to represent only the at least one third unit and how it represents only the at least one third unit.

7.5 Claim 12 states in part, “the units are used to design a technical system”. The specification does not describe anywhere how the units are used to design the technical system.

7.6 Claim 13 states in part, “a first unit connected to a set of second units in a predefined fashion; and at least one third unit determined from the set of second units which has a predefined relationship with the first unit”. The specification does not describe anywhere what is meant by “predefined fashion” and “predefined relationship”. The specification does not describe what is a first unit, what is a second unit and what is a third unit and what are the criteria to classify the units as the first, second and the third units.

7.7 Claim 15 states in part, “the at least one third element fulfils a predefined connection criterion to the first unit”. The specification does not describe anywhere what is the predefined connection criterion and how it is selected or specified.

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7.8 Claim 17 states in part, “the first unit is used to represent *only the at least one third unit* which is a predecessor of the first unit”. The specification does not describe why the first unit is used to represent only the at least one third unit and how it represents only the at least one third unit.

7.9 Claim 18 states in part, “the first unit is used to represent *only the at least one third unit* which is a successor of the first unit”. The specification does not describe why the first unit is used to represent only the at least one third unit and how it represents only the at least one third unit.

Claims rejected but not specifically addressed are rejected based on their dependency on rejected claims.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9.1 Claim 1 states in part, “A preprocessing method”, “a first unit”, “a set of second units”, “one third unit” and “carrying out structural preparation”. There are broad terms used with no

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scope limitations. Therefore the examiner has assumed wide interpretations for the same as required by law. Does this claim relate to first unit of coal, second unit of coke, third unit of pig iron and the preprocessing of burning coal to produce coke, structural preparation of melting pig iron with coke to produced molted iron as part of producing cast iron parts? Does it relate to cooking food on the oven which also includes preprocessing, first unit (you name it), the second unit, the third unit and the structural preparation (cooking)? Does this relate to making garments in the factory, which also would include some preprocessing (you can name it), a first unit, a second unit, a third unit and some structural preparation? The examiner is at a loss to understand what the applicant is attempting to claim in this claim. Is every thing under the sun included in this omnibus claim? The terms “A preprocessing method”, “first unit”, “second units”, “third unit” and “carrying out structural preparation” are undefined, making the claim vague and indefinite.

9.2 Claim 4 states in part, “at least one third element fulfils a predefined connection criterion to the first unit”. The term “a predefined connection criterion” is undefined, making the claim vague and indefinite.

9.3 Claim 5 states in part, “the units have an orientation with respect to one another”. The term orientation is undefined, making the claim vague and indefinite.

9.4 Claim 12 states in part, “A processing arrangement”, “a first unit”, “a set of second units”, “one third unit” and “carrying out structural preparation”. The terms “A preprocessing

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arrangement”, “first unit”, “second units”, “third unit” and “carrying out structural preparation” are undefined, making the claim vague and indefinite.

9.5 Claim 15 states in part, “at least one third element fulfils a predefined connection criterion to the first unit”. The term “a predefined connection criterion” is undefined, making the claim vague and indefinite.

9.6 Claim 16 states in part, “the units have an orientation with respect to one another”. The term orientation is undefined, making the claim vague and indefinite.

Claims rejected but not specifically addressed are rejected based on their dependency on rejected claims.

10. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation " The method as claimed in claim 2" in Line 1 of the claim. There is insufficient antecedent basis for this limitation as there is no claim 2 in the amended set of claims.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

12. Claims 1, 3-5, 8-9, 12-16 and 19-20 are rejected under 35 U.S.C. § 102(e) as being anticipated by **Hershey et al.** (U.S. Patent 5,375,070).

12.1 **Hershey et al.** teaches information collection architecture and method for a data communication network. Specifically, as per claim 1, **Hershey et al.** teaches a preprocessing method (CL2, L7-9); comprising:

connecting a first unit (record of all frames) to a set of second units (time stamps) in a predefined fashion (CL1, L40-46);

determining at least one third unit (statistical information) from the set of second units which has a predefined relationship with the first unit (frames) (CL1, L47-56; CL4, L12-15); and

carrying out structural preparation (statistical information collection) of the at least one third unit as preprocessing (CL1, L52-56; CL2, L7-13; CL4, L31-40).

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Per claim 3: **Hershey et al.** teaches that the structural preparation is carried out by representing a shortened connection to the first unit (CL1, L52-56).

Per claim 4: **Hershey et al.** teaches that the at least one third element fulfils a predefined connection criterion to the first unit (CL1, L54-56).

Per claim 5: **Hershey et al.** teaches that the units have an orientation with respect to one another (CL1, L40-56).

Per claim 8: **Hershey et al.** teaches that the at least one third unit is indicated with a short connection to the first unit (CL1, L52-56).

Per claim 9: **Hershey et al.** teaches that the units are information, in particular activities and/or results of the activities (CL1, L8-10; CL1, L37-68; CL2, L10-13).

Per claim 12: **Hershey et al.** teaches that the units are used to design a technical system (CL2, L65-66; CL4, L36-37).

12.2 As per claim 13, **Hershey et al.** teaches a processing arrangement, having a processing unit (CL3, L55-62); comprising:

a first unit connected to a set of second units in a predefined fashion (CL1, L40-46);

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at least one third unit determined from the set of second units which has a predefined relationship with the first unit (CL1, L47-56; CL4, L12-15); and

a structural preparation of the at least one third unit being carried out as preprocessing (CL1, L52-56; CL2, L7-13; CL4, L31-40).

Per claim 14: **Hershey et al.** teaches that the structural preparation is carried out by representing a shortened connection to the first unit (CL1, L52-56).

Per claim 15: **Hershey et al.** teaches that the at least one third element fulfils a predefined connection criterion to the first unit (CL1, L54-56).

Per claim 16: **Hershey et al.** teaches that the units have an orientation with respect to one another (CL1, L40-56).

Per claim 19: **Hershey et al.** teaches that the at least one third unit is indicated with a short connection to the first unit (CL1, L52-56).

Per claim 20: **Hershey et al.** teaches that the units are information, in particular activities and/or results of the activities (CL1, L8-10; CL1, L37-68; CL2, L10-13).

Claim Rejections - 35 USC § 103

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13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

14. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

15. Claims 6-7, 10-11 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hershey et al.** (U.S. Patent 5,375,070) in view of **Minami et al.** (U.S. Patent application 2002/0042810).

15.1 As per claim 6, **Hershey et al.** teaches the method of claim 1. **Hershey et al.** does not expressly teach that the first unit is used to represent only the at least one third unit which is a predecessor of the first unit. **Minami et al.** teaches that the first unit is used to represent only the at least one third unit which is a predecessor of the first unit (Page 2, Para 0019), because the predecessor has link information relative the first activity (Page 2, Para 0019). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the

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method of **Hershey et al.** with the method of **Minami et al.** that included the first unit being used to represent only the at least one third unit which was a predecessor of the first unit. The artisan would have been motivated because the predecessor would have link information relative the first activity.

15.2 As per claim 7, **Hershey et al.** teaches the method of claim 1. **Hershey et al.** does not expressly teach that the first unit is used to represent only the at least one third unit which is a successor of the first unit. **Minami et al.** teaches that the first unit is used to represent only the at least one third unit which is a successor of the first unit (Page 2, Para 0019; Page 3, Para 0028), because the successor has link information relative the second activity (Page 2, Para 0019). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of **Hershey et al.** with the method of **Minami et al.** that included the first unit being used to represent only the at least one third unit which was a successor of the first unit. The artisan would have been motivated because the successor would have link information relative the second activity.

15.3 As per claim 10, **Hershey et al.** teaches the method of claim 1. **Hershey et al.** does not expressly teach visualizing a technical system or a portion thereof. **Minami et al.** teaches visualizing a technical system or a portion thereof (Fig. 9-11), because that will enable a user to easily perform the development of the system (Page 7, Para 0100). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of **Hershey et al.** with the method of **Minami et al.** that included visualizing a technical system or

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a portion thereof. The artisan would have been motivated because that would enable a user to easily perform the development of the system.

15.4 As per claim 11, **Hershey et al.** teaches the method of claim 1. **Hershey et al.** does not expressly teach that the representation is effected by means of actuation using a context-sensitive menu. **Minami et al.** teaches that the representation is effected by means of actuation using a context-sensitive menu (Fig. 9-11; Page 7, Para 0102-0108), because that will enable a user to easily perform the development of the system (Page 7, Para 0100). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of **Hershey et al.** with the method of **Minami et al.** that included the representation being effected by means of actuation using a context-sensitive menu. The artisan would have been motivated because that would enable a user to easily perform the development of the system.

15.5 As per claim 17, **Hershey et al.** teaches the method of claim 5. **Hershey et al.** does not expressly teach that the first unit is used to represent only the at least one third unit which is a predecessor of the first unit. **Minami et al.** teaches that the first unit is used to represent only the at least one third unit which is a predecessor of the first unit (Page 2, Para 0019), because the predecessor has link information relative the first activity (Page 2, Para 0019). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of **Hershey et al.** with the method of **Minami et al.** that included the first unit being used to represent only the at least one third unit which was a predecessor of the first unit. The

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artisan would have been motivated because the predecessor would have link information relative the first activity.

15.6 As per claim 18, **Hershey et al.** and **Minami et al.** teach the method of claim 6.

Hershey et al. does not expressly teach that the first unit is used to represent only the at least one third unit which is a successor of the first unit. **Minami et al.** teaches that the first unit is used to represent only the at least one third unit which is a successor of the first unit (Page 2, Para 0019; Page 3, Para 0028), because the successor has link information relative the second activity (Page 2, Para 0019). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the method of **Hershey et al.** with the method of **Minami et al.** that included the first unit being used to represent only the at least one third unit which was a successor of the first unit. The artisan would have been motivated because the successor would have link information relative the second activity.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kandasamy Thangavelu whose telephone number is 571-272-3717. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:30 PM.

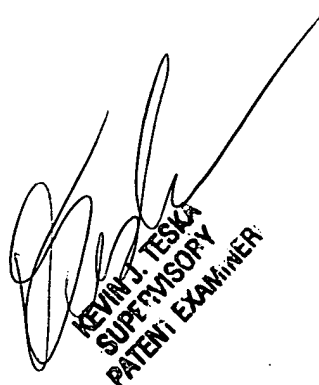
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Teska, can be reached on 571-272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-9600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Thangavelu
Art Unit 2123
February 4, 2005



KEVIN J. TESKA
SUPERVISORY
PATENT EXAMINER